Claim Amendments

1-235. (Cancelled)

236. A method for increasing Nitric Oxide production in a subject, the method comprising the step of: administering to the subject a HMG-CoA reductase inhibitor in an amount effective to increase Nitric Oxide production in a tissue of the subject.

237. The method of claim 236, wherein the subject is nonhypercholesterolemic or nonhyperlipidemic.

238. The method of claim 236, wherein the subject has a cardiovascular disease or disorder or a cerebrovascular disease or disorder.

239. The method of claim 236, wherein the HMG-CoA reductase inhibitor is selected from the group consisting of simvastatin, lovastatin, atorvastatin, pravastatin, cerivastatin, and fluvastatin.

240. The method of claim 236, wherein the HMG-CoA reductase inhibitor is simvastatin.

241. The method of claim 236, wherein the HMG-CoA reductase inhibitor is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

242. The method of claim 236, wherein the HMG-CoA reductase inhibitor is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

243. The method of claim 236, further comprising co-administering a substrate of Nitric Oxide Synthase.

244. The method of claim 243, wherein the substrate of Nitric Oxide Synthase is L-arginine.

245. The method of claim 243, wherein the substrate of Nitric Oxide Synthase is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

246. The method of claim 243, wherein the substrate of Nitric Oxide Synthase is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

247. The method of claim 236, further comprising co-administering a Nitric Oxide Synthase cofactor.

248. The method of claim 247, wherein the Nitric Oxide Synthase cofactor is NADPH or tetrahydrobiopterin.

249. A method for attenuating the downregulation of Nitric Oxide production in a subject, the method comprising the step of: administering to the subject a HMG-CoA reductase inhibitor in an amount effective to attenuate the downregulation of Nitric Oxide production in a tissue of the subject.

250. The method of claim 249, wherein the subject is nonhypercholesterolemic or nonhyperlipidemic.

251. The method of claim 249, wherein the subject has a cardiovascular disease or disorder or a cerebrovascular disease or disorder.

252. The method of claim 249, wherein the HMG-CoA reductase inhibitor is selected from the group consisting of simvastatin, lovastatin, atorvastatin, pravastatin, cerivastatin, and fluvastatin.

253. The method of claim 249, wherein the HMG-CoA reductase inhibitor is simvastatin.

254. The method of claim 249, wherein the HMG-CoA reductase inhibitor is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

255. The method of claim 249, wherein the HMG-CoA reductase inhibitor is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

256. The method of claim 249, further comprising co-administering a substrate of Nitric Oxide Synthase.

257. The method of claim 256, wherein the substrate of Nitric Oxide Synthase is L-arginine.

258. The method of claim 256, wherein the substrate of Nitric Oxide Synthase is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

259. The method of claim 256, wherein the substrate of Nitric Oxide Synthase is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

260. The method of claim 249, further comprising co-administering a Nitric Oxide Synthase cofactor.

261. The method of claim 260, wherein the Nitric Oxide Synthase cofactor is NADPH or tetrahydrobiopterin.

262. A method for treating a nonhypercholesterolemic or nonhyperlipidemic subject with a cardiovascular disease or disorder, the method comprising the step of: administering to the subject a HMG-CoA reductase inhibitor.

263. The method of claim 262, wherein the cardiovascular disease or disorder is atrial fibrillation, unstable angina, Prinzmetal's angina, ventrical tachycardia, dilated cardiomyapathy, pulmonary hypertension, coronary heart disease, myocardial infarction, or cardiomegaly.

264. The method of claim 262, further comprising co-administering a second agent.

265. The method of claim 264, wherein the second agent is selected from the group consisting of: cardioprotectants, cardiac depressants, cardiotonics, cerebral ischmemia agents, unstable angina agents, vascoconstrictors, antithrombotics, and cardiovascular agents.

266. The method of claim 262, wherein the HMG-CoA reductase inhibitor is selected from the group consisting of simvastatin, lovastatin, atorvastatin, pravastatin, cerivastatin, and fluvastatin.

267. The method of claim 262, wherein the HMG-CoA reductase inhibitor is simvastatin.

268. The method of claim 262, wherein the HMG-CoA reductase inhibitor is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

269. The method of claim 262, wherein the HMG-CoA reductase inhibitor is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

270. The method of claim 262, further comprising co-administering a substrate of Nitric Oxide Synthase.

271. The method of claim 270, wherein the substrate of Nitric Oxide Synthase is L-arginine.

272. The method of claim 270, wherein the substrate of Nitric Oxide Synthase is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

273. The method of claim 270, wherein the substrate of Nitric Oxide Synthase is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

274. The method of claim 262, further comprising co-administering a Nitric Oxide Synthase cofactor.

275. The method of claim 274, wherein the Nitric Oxide Synthase cofactor is NADPH or tetrahydrobiopterin.

276. A method for treating a subject with a cerebrovascular disease or disorder comprising: administering to the subject a HMG-CoA reductase inhibitor.

277. The method of claim 276, wherein the subject is nonhypercholesterolemic or nonhyperlipidemic.

278. The method of claim 276, wherein the cerebrovascular disease or disorder is cereberal autosomal dominant arteriopathy with subcortical infarcts and leucoencephalopathy (CADASIL), neurodegenerative disease, Parkinson's Disease, Huntington's Disease, Alzheimer's Disease, or amyotrophic lateral sclerosis (ALS).

279. The method of claim 276, further comprising co-administering a second agent.

280. The method of claim 279, wherein the second agent is selected from the group consisting of: analeptics, analgetics, anesthetics, adrenergic agents, anti-adrenergic agents, amino acids, antagonists, antidotes, anti-anxiety agents, anticholinergics, anticolvunsants, antidepressants, anti-emetics, anti-epileptics, anti-hypertensives, anti-fibrinolytics, antihyperlipidemics, antimigraines, antinauseants, antineoplastics, antiobessional agents, antiparkinsonian agents, antipsychotics, appetite suppressants, blood glucose regulators, cognition adjuvants, cognition enhancers, dopaminenergic agents, emetics, free oxygen radical scavengers, glucocorticoids, hypocholesterolemics, holylipidemics, histamine H2 receptor antagonists, immunosuppressants, inhibitors, memory adjuvants, mental performance enhancers, mood regulators, mydriatics, neuromuscular blocking agents, neuroprotectives, NMDA antagonists, post-stroke and post-head trauma treatments, psychotropics, sedatives, sedative-hypnotics, serotonin inhibitors, tranquilizers, agents for the treatment of cerebral ischemia, calcium channel blockers, free radical scavengers - antioxidants, GABA agonists, glutamate antagonists, AMPA antagonists, kainate antagonists, competitive and non-competitive NMDA antagonists, growth factors, opioid antagonists, phosphatidyleholine precursors, serotonin agonists, sodium-and calcium-channel blockers, and potassium channel openers.

281. The method of claim 276, wherein the HMG-CoA reductase inhibitor is selected from the group consisting of simvastatin, lovastatin, atorvastatin, pravastatin, cerivastatin, and fluvastatin.

282. The method of claim 276, wherein the HMG-CoA reductase inhibitor is simvastatin.

283. The method of claim 276, wherein the HMG-CoA reductase inhibitor is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

284. The method of claim 276, wherein the HMG-CoA reductase inhibitor is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

285. The method of claim 276, further comprising co-administering a substrate of Nitric Oxide Synthase.

286. The method of claim 285, wherein the substrate of Nitric Oxide Synthase is L-arginine.

287. The method of claim 285, wherein the substrate of Nitric Oxide Synthase is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

288. The method of claim 285, wherein the substrate of Nitric Oxide Synthase is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

289. The method of claim 276, further comprising co-administering a Nitric Oxide Synthase cofactor.

290. The method of claim 289, wherein the Nitric Oxide Synthase cofactor is NADPH or tetrahydrobiopterin.

291. A method for increasing cerebral blood flow in a cerebral tissue of a subject comprising: administering to the subject a HMG-CoA reductase inhibitor in an amount effective to increase Nitric Oxide Synthase activity in the cerebral tissue of the subject.

292. The method of claim 291, further comprising co-administering a second agent to the subject.

293. The method of claim 292, wherein the delivery of the second agent is enhanced by the increased blood flow.

294. The method of claim 292, wherein the second agent is selected from the group consisting of: analeptics, analgetics, anesthetics, adrenergic agents, anti-adrenergic agents, amino acids, antagonists, antidotes, anti-anxiety agents, anticholinergics, anticolvunsants, antidepressants, anti-emetics, anti-epileptics, anti-hypertensives, anti-fibrinolytics, antihyperlipidemics, antimigraines, antinauseants, antineoplastics, antiobessional agents, antiparkinsonian agents, antipsychotics, appetite suppressants, blood glucose regulators, cognition adjuvants, cognition enhancers, dopaminenergic agents, emetics, free oxygen radical scavengers, glucocorticoids, hypocholesterolemics, holylipidemics, histamine H2 receptor antagonists, immunosuppressants, inhibitors, memory adjuvants, mental performance enhancers, mood regulators, mydriatics, neuromuscular blocking agents, neuroprotectives, NMDA antagonists, post-stroke and post-head trauma treatments, psychotropics, sedatives, sedative-hypnotics, serotonin inhibitors, tranquilizers, agents for the treatment of cerebral ischemia, calcium channel blockers, free radical scavengers - antioxidants, GABA agonists, glutarnate antagonists, AMPA antagonists, kainate antagonists, competitive and non-competitive NMDA antagonists, growth factors, opioid antagonists, phosphatidyleholine precursors, serotonin agonists, sodium-and calcium-channel blockers, and potassium channel openers.

295. The method of claim 291, wherein the HMG-CoA reductase inhibitor is selected from the group consisting of simvastatin, lovastatin, atorvastatin, pravastatin, cerivastatin, and fluvastatin.

296. The method of claim 291, wherein the HMG-CoA reductase inhibitor is simvastatin.

297. The method of claim 291, wherein the HMG-CoA reductase inhibitor is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

298. The method of claim 291, wherein the HMG-CoA reductase inhibitor is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

299. The method of claim 291, further comprising co-administering a substrate of Nitric Oxide Synthase.

300. The method of claim 299, wherein the substrate of Nitric Oxide Synthase is L-arginine.

301. The method of claim 299, wherein the substrate of Nitric Oxide Synthase is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

302. The method of claim 299, wherein the substrate of Nitric Oxide Synthase is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

303. The method of claim 291, further comprising co-administering a Nitric Oxide Synthase cofactor.

304. The method of claim 303, wherein the Nitric Oxide Synthase cofactor is NADPH or tetrahydrobiopterin.

305. A method for increasing Nitric Oxide Synthase activity in a subject, the method comprising the step of: administering to the subject a HMG-CoA reductase inhibitor and a Nitric Oxide Synthase substrate in an amount effective to increase Nitric Oxide Synthase activity in the subject.

306. The method of claim 305, wherein the HMG-CoA reductase inhibitor is selected from the group consisting of simvastatin, lovastatin, atorvastatin, pravastatin, cerivastatin, and fluvastatin.

307. The method of claim 305, wherein the HMG-CoA reductase inhibitor is simvastatin.

308. The method of claim 305, wherein the HMG-CoA reductase inhibitor is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

309. The method of claim 305, wherein the HMG-CoA reductase inhibitor is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

310. The method of claim 305, further comprising co-administering a substrate of Nitric Oxide Synthase.

311. The method of claim 310, wherein the substrate of Nitric Oxide Synthase is L-arginine.

312. The method of claim 310, wherein the substrate of Nitric Oxide Synthase is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

313. The method of claim 310, wherein the substrate of Nitric Oxide Synthase is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

314. The method of claim 305, wherein the HMG-CoA reductase inhibitor and the Nitric Oxide synthase are administered simultaneously.

315. The method of claim 305, wherein the HMG-CoA reductase inhibitor and the Nitric Oxide synthase are administered sequentially.

316. A method for increasing Nitric Oxide production in a subject, the method comprising the step of: administering to a subject a HMG-CoA reductase inhibitor and a second agent.

317. The method of claim 316, wherein the HMG-CoA reductase inhibitor is selected from the group consisting of simvastatin, lovastatin, atorvastatin, pravastatin, cerivastatin, and fluvastatin.

318. The method of claim 316, wherein the HMG-CoA reductase inhibitor is simvastatin.

319. The method of claim 316, wherein the HMG-CoA reductase inhibitor is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

320. The method of claim 316, wherein the HMG-CoA reductase inhibitor is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

321. The method of claim 316, wherein the second agent is NADPH.

322. The method of claim 316, wherein the second agent is L-arginine.

323. The method of claim 316, wherein the second agent is an antihyperlipoproteinemic.

324. The method of claim 316, wherein the second agent is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

325. The method of claim 316, wherein the second agent is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

326. The method of claim 316, wherein the HMG-CoA reductase inhibitor and the second agent are administered simultaneously.

327. The method of claim 316, wherein the HMG-CoA reductase inhibitor and the second agent are administered sequentially.

328. A method for treating a subject with an inflammatory disease or disorder comprising: administering to the subject a HMG-CoA reductase inhibitor.

329. The method of claim 328, wherein the subject is nonhypercholesterolemic or nonhyperlipidemic.

330. The method of claim 328, wherein the inflammatory disease or disorder is a rheumatological disease selected from the group consisting of lupus, rheumatoid arthritis, scleroderma, multiple sclerosis, and other autoimmune diseases.

331. The method of claim 328, further comprising co-administering a second agent.

332. The method of claim 331, wherein the second agent is selected from the group consisting of: analeptics, analgetics, anesthetics, adrenergic agents, anti-adrenergic agents, amino acids, antagonists, antidotes, anti-anxiety agents, anticholinergics, anticolvunsants, antidepressants, anti-emetics, anti-epileptics, anti-hypertensives, anti-fibrinolytics, antihyperlipidemics, antimigraines, antinauseants, antineoplastics, antiobessional agents, antiparkinsonian agents, antipsychotics, appetite suppressants, blood glucose regulators, cognition adjuvants, cognition enhancers, dopaminenergic agents, emetics, free oxygen radical scavengers, glucocorticoids, hypocholesterolemics, holylipidemics, histamine H2 receptor antagonists, immunosuppressants, inhibitors, memory adjuvants, mental performance enhancers, mood regulators, mydriatics, neuromuscular blocking agents, neuroprotectives, NMDA antagonists, post-stroke and post-head trauma treatments, psychotropics, sedatives, sedative-hypnotics, serotonin

inhibitors, tranquilizers, agents for the treatment of cerebral ischemia, calcium channel blockers, free radical scavengers - antioxidants, GABA agonists, glutamate antagonists, AMPA antagonists, kainate antagonists, competitive and non-competitive NMDA antagonists, growth factors, opioid antagonists, phosphatidyleholine precursors, serotonin agonists, sodium-and calcium-channel blockers, and potassium channel openers.

333. The method of claim 328, wherein the HMG-CoA reductase inhibitor is selected from the group consisting of simvastatin, lovastatin, atorvastatin, pravastatin, cerivastatin, and fluvastatin.

334. The method of claim 328, wherein the HMG-CoA reductase inhibitor is simvastatin.

335. The method of claim 328, wherein the HMG-CoA reductase inhibitor is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

336. The method of claim 328, wherein the HMG-CoA reductase inhibitor is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

337. The method of claim 328, further comprising co-administering a substrate of Nitric Oxide Synthase.

338. The method of claim 337, wherein the substrate of Nitric Oxide Synthase is L-arginine.

339. The method of claim 337, wherein the substrate of Nitric Oxide Synthase is administered in a sustained release delivery system, a delayed release delivery system, or a time release delivery system.

340. The method of claim 337, wherein the substrate of Nitric Oxide Synthase is administered in the form of a capsule, tablet, lozenge, or injectable preparation.

341. The method of claim 328, further comprising co-administering a Nitric Oxide Synthase cofactor.

342. The method of claim 341, wherein the Nitric Oxide Synthase cofactor is NADPH or tetrahydrobiopterin.